



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,553	07/16/2004	Shigeharu Taira	DK-US020066	4864
22919	7590	10/06/2005		
SHINJYU GLOBAL IP COUNSELORS, LLP 1233 20TH STREET, NW, SUITE 700 WASHINGTON, DC 20036-2680			EXAMINER WEST, PAUL M	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,553

Applicant(s)

TAIRA, SHIGEHARU

Examiner

Paul M. West

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03312005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pastorello in view of admitted prior art (page 2, lines 4-9).

As to claims 1-5, 8, and 9, Pastorello teaches a method for determining the extent of contamination of residue from refrigerant-using equipment comprising: applying residual material remaining inside the refrigerant-using equipment to a first section of a check tool (Abstract, lines 7-8); and performing a determination with regard to the contamination of the residual material based upon a color of the first section of the check tool to which it was applied and a plurality of reference colors of a second section of the check tool (--standard set of colors--), the first section having a color that is compared to the reference colors of the second section to perform the determination (Abstract, lines 11-15), and the reference colors including boundary colors indicating specific thresholds of contamination (See chart, bottom of Col. 4). Pastorello does not teach correlating the color, which indicates contamination of the residual material, to the reusability of the refrigerant-using equipment or correlating these boundary colors with determinations that cleaning is or is not necessary or that the refrigerant-using

Art Unit: 2856

equipment is or is not usable . Admitted prior art (page 2, lines 4-9) discloses that contaminated refrigerator oil will adhere to refrigerant-using equipment and that the extent of contamination of the oil is an indication of the reusability of the refrigerant-using equipment. It would have been obvious to one of ordinary skill in the art to combine the teachings of Pastorello with admitted prior art (page 2, lines 4-9) because determining whether certain equipment is reusable can be much more efficient and cost-effective than always replacing it. It would have been further obvious to correlate the boundary reference colors with determinations about the actions to be taken with regards to the refrigerant-using equipment because doing so would prevent dangerous or environmentally harmful incidents which could occur as the result of using damaged or unclean equipment.

As to claim 7, Pastorello's check tool acts as a pH analysis tool that changes color by means of an acid (Col. 2, lines 37-40); residual material is applied to the check tool in the first step; and the degree of degradation of the residual material is estimated from the color of the check tool in the second step (Abstract, lines 7-16).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pastorello in view of admitted prior art (page 2, lines 4-9) and further in view of McNeely.

As to claim 6, the combination of Pastorello and admitted prior art (page 2, lines 4-9) teaches a check tool as described above that can be used with the method of claim 2 wherein the first means and second means are disposed near each other but does not teach the first means and the second means being unitary. McNeely teaches a pH

Art Unit: 2856

indicator device which indicates pH by changing color and incorporates the reference color on the device as a unitary piece (Col. 7, lines 19-21). It would have been obvious to one of ordinary skill in the art to employ the teachings of McNeely with the combination of Pastorello and admitted prior art (page 2, lines 4-9) in order to make a tool that is one unitary piece because fewer parts make manufacturing and using the device more efficient.

Response to Arguments

1. Applicant's arguments filed 20 September 2005 have been fully considered but they are not persuasive. Applicant has argued that the Pastorello reference does not disclose applying residual material, which **remains inside** the refrigerant using equipment to a check tool. However, the Pastorello reference clearly discloses taking refrigerant oil from inside the refrigerant using equipment (i.e. **remaining inside** the refrigerant using equipment) and applying it to the check tool (Abstract, lines 1-3).

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

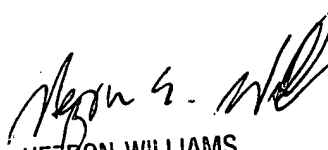
Art Unit: 2856

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul M. West whose telephone number is (571) 272-8590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800